

ABSTRACT

The hollow bead of high quality are applied and molded into a shape corresponding to and following the shape of a applying position onto which the bead are to be applied. The bead-molding apparatus includes a discharging device 10 of a double nozzle structure 12 comprised of an inner nozzle 36 and an outer nozzle 38, a highly viscous material feed unit 16 for feeding a highly viscous material that is fluid in the form of a stream in a high speed flow region and can retain the shape into which it is applied and molded in a low speed flow region, a manipulator 60 disposed so as to transfer the discharging device 10 mounted thereon to a desired position, and a controller 22 for controlling the overall operations of the apparatus.

15 The discharging device 10 is controlled so as to move along the applying position of a work 23 while feeding gases thereto from the inner nozzle 36 and discharging the highly viscous material thereto from the outer nozzle 38.